

Data Highlights from the 2007 Hawai'i Youth Tobacco Survey (YTS) and Comparisons with Prior Years

Tobacco Prevention and Control Program
Chronic Disease Management and Control Branch
Community Health Division
Hawai'i State Department of Health
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2007 data summary compiled by Ann Pobutsky, PhD
2003 & 2005 data summary compiled by Tonya Lowery-St. John, MPH
2000 data summary compiled by Lila Johnson, MPH

Overview

The overall impact of tobacco on lives of Hawaii's youth has declined during the years from 2000 to 2007.

Tobacco use, especially cigarette use, has declined dramatically, yet smokeless tobacco use has increased.

- ✓ In high school (HS) reported lifetime (ever use) cigarette use dropped from 63.3% in 2000 to 38.3% by 2007, while current smoking decreased from 24.5% in 2000 to 9.7% in 2007, and frequent smoking was reduced from 10.3% in 2000 to 3.0% in 2007.
- ✓ In middle school (MS) reported lifetime (ever use) of cigarettes plummeted from 38.4% in 2000 to 14.7% in 2007, while current smoking went from 12.9% in 2000 to 4.2% in 2007, and frequent smoking decreased from 2.1% to less than 1%.
- ▽ In both HS, reported current smoking was slightly higher among females (9.8%) than males (9.5%), while in MS it was about the same (4.3%) for both sexes.
- ▽ Among current reported tobacco users, while current cigarette use has decreased, current smokeless tobacco use has increased. Among HS students, smokeless tobacco use has increased from 2.8% in 2003 and to 3.7% in 2007. Among MS students, smokeless tobacco use has increased from 1.7% in 2003 to 2.8% in 2007.
- ▽ There has been an increased in the reported use of menthol cigarettes among MS students, from 61.5% in 2000 to 70.3% in 2007, with a slight decrease among HS students, from 76.1% in 2000 to 72.4% in 2007.

Schools

- ✓ Only 4.6 % of HS students and 2.7% of MS reportedly smoked on campus in 2007 (from 12.2% and 5.8% in 2000).
- ✓ The proportion of HS students who were taught at school about the dangers of tobacco use has decreased from 50.9% in 2000 to 45.9% in 2007 and this is an even greater decrease among MS students (from 79.9% in 2000 to 52.6% in 2007).

Access to tobacco from stores has decreased while other methods of obtaining cigarettes have increased.

- ✓ The proportion of underage smokers less than 18 years of age who reported usually getting their cigarettes from a store has decreased quite dramatically from 25.9% to 7.1% among HS students and from 7.4% to 2.3% among MS students. The proportion who reported giving money to someone to buy cigarettes has increased in HS students (from 25.4% in 2000 to 35.1% in 2007) and remained about the same among MS students (from 16.3% to 14.6%).
- ✓ About one-third of both HS and MS smokers under 18 years old who bought cigarettes in the past month were refused sale.

- ▼ Among HS students, the proportion who reported taking cigarettes from a store or family member increased from 2.6% to 4.4% and the proportion that report obtaining cigarettes “some other way” (unspecified) has doubled from 10.8% to 18.5%. The proportion of MS students who report obtaining cigarettes “some other way” has also increased from 25.9% to 33.9%.
- ▼ Among both HS students, the proportion who reported purchasing cigarettes on the Internet has increased from 0.7% in 2000 to 2.7% in 2007, and this is even greater among MS students (from 2.7% in 2000 to 7.0% in 2007).
- ▼ About 28% of both HS and MS students know where to buy loose cigarettes and the proportion of students who report purchasing cigarettes from a lunch wagon or *manapua* truck has slightly increased from 13% to 14% for HS since 2005 and remained at about 10% for MS.
- ▼ The proportion who reported purchasing cigarettes from the Internet has increased since 2000 from less than 1% to 2.7% among HS students and from 2.7% to 7.0% among MS students.

Most students who do smoke now are trying to quit.

- ✓ Fully two thirds of both HS (64.2%) and MS (75.2%) current smokers tried to quit smoking in the past year.
- ▼ 50.2% of HS and 47.1% of MS and smokers were unable to stay quit for one month during their last attempt.
- ▼ The proportion reporting that they wanted to quit has decreased from 2005 to 2007.

Media

- ▼ While 76.6% of HS and 71.3% of MS students report regularly see ads for tobacco and tobacco products in stores, this is a decrease from previous years.
- ✓ 78.2% of HS and 65.0% of MS students have seen or heard an anti-tobacco ad in the past month.
- ✓ The proportion of HS students who reported seeing tobacco product ads on the Internet has increased dramatically from 21.6% in 2000 to 82.8% in 2007, and the proportion among MS students has also increased from 32.9% to 74.3%.

Exposure to second hand smoke (SHS) in the past week has continued to decrease:

- ✓ Only 45.4% of HS and 35.5% of MS students who never smoked reported being exposed to SHS in a room in 2007, down from 68.0% and 53.7% in 2000, but exposure was higher for current smokers (79%) with little change from previous survey years.
- ✓ Only 21.4% of HS and 24.8% of MS students who never smoked reported being exposed to SHS in a car in 2007, a decrease from 49.4% and 40.0% in 2000, but exposure was higher for current smokers (82.3%) with little change from previous survey years.

Background and Methods

The Youth Tobacco Survey (YTS) was designed by the Centers for Disease Control and Prevention (CDC) in collaboration with participating states. YTS surveys are conducted at the national, state and city level. Additionally, many countries participate in the global YTS allowing for comparison across all participating areas.

The 2007 Hawaii YTS data used in this report were collected using a self-administered survey format and employed a two-stage cluster design to produce a representative sample of students in grades 9-12. The first-stage sampling frame consisted of all public schools containing any grades 9-12. The second sampling stage consisted of systematic equal probability sampling (with a random start) of classes from each school that participated in the survey. All 2nd period classes in the selected schools were included in the sampling frame. All students in the selected classes were eligible to participate in the survey. Schools were selected with probability proportional to school enrollment size. Active parental consent was required for each student participating in the survey.

The overall survey response rates were calculated by multiplying the school response rate by the student response rate. In the high school sampling frame, 27 of the 28 sampled schools participated, with 96.43% of schools and 64.93% of eligible students (n=1,865) participating, yielding a survey response rate of 62.61% (96.43% x 64.93%). The high school sample resulted in n=1,211 completed and useable questionnaires. In the middle school sampling frame, 27 of the 28 schools participated, with 96.43% of schools and 64.16% of eligible students (n=1,833) participating, yielding a survey response rate of 61.87% (96.43% x 64.16%). The middle school sample resulted in n=1,176 completed and useable questionnaires.

A weight has been associated with each questionnaire to reflect the likelihood of sampling each student and to reduce bias by compensating for differing patterns of non-response. Additional details on the methods can be found at www.cdc.gov/mmwr. Table 1 in the appendix gives more detailed demographic information on the 2005 HYTS respondents.

This overview provides results from the middle school and high school surveys for 2007 and compares them with the results from the 2000, 2003 and 2005 HYTS.

Table 1. Participant demographics by school type by sex, race, ethnicity and grade, HYTS 2007 (% UNDER 18 YEARS)

	Middle School		High School	
	n	Weighted %	n	Weighted %
Total	1,172	100.0	1,210	100.0
Sex				
Male	552	50.9	536	49.6
Female	620	49.1	661	50.4
Ethnicity*				
Native Hawaiian	226	20.2	212	17.3
Filipino	306	27.3	316	32.3
European Am/White	113	10.1	147	13.0
Japanese	129	11.5	182	14.1
Pacific Islander	73	6.5	101	7.1
Chinese	46	4.1	44	4.0
African Am/Black	38	3.4	31	2.5
Other	129	11.5	127	9.5
Hispanic/Latino	53	4.7	135	5.3
Grade				
6th	202	32.9		
7th	486	33.5		
8th	475	33.6		
9th			299	29.7
10th			281	24.4
11th			378	24.9
12th			239	21.0

Note: Demographic totals may not add to survey participant totals due to skipped questions or unusable answers.

*Ethnicity is based on a combination of 2 questions where the students were asked to pick one ethnic group to best describe themselves. Native Hawaiian includes part-Native Hawaiian. A student can be Hispanic/Latino in combination with other ethnicities.

Table 2. Prevalence of selected tobacco indicators by school type, Hawaii YTS 2000, 2003, 2005 and 2007								
	Middle School				High School			
Tobacco Indicator	2000 HI %	2003 HI %	2005 HI %	2007 HI %	2000 HI %	2003 HI %	2005 HI %	2007 HI %
Prevalence								
Ever used tobacco (lifetime use):								
Cigarettes	38.4	21.1	20.1	14.7	63.3	47.8	43.5	38.3
Cigar use	12.6	8.8	10.1	7.7	27.5	19.5	20.4	17.1
Smokeless tobacco	7.3	8.0	7.7	5.8	10.4	10.5	10.1	8.2
<i>Bidis</i> (hand-rolled India cigarettes)	6.1	4.2	4.3	4.1	13.2	6.9	5.4	5.0
<i>Kreteks</i> (clove cigarettes)	3.5	2.5	2.3	2.5	11.0	5.5	4.1	3.7
Any of the above forms of tobacco	43.5	29.6	28.3	21.3	67.7	53.6	49.8	43.7
Used tobacco in past month (current use):								
Cigarettes	12.9	5.3	4.9	4.2	24.5	14.9	12.6	9.7
Cigar use	2.9	2.1	1.8	2.5	4.9	5.1	3.4	5.7
Smokeless tobacco	2.7	1.7	1.8	2.4	3.4	2.8	2.1	3.7
Pipes	2.9	2.8	2.2	2.8	3.7	4.1	2.8	3.9
<i>Bidis</i> (hand-rolled India cigarettes)	3.3	2.2	2.8	2.4	5.2	3.9	2.3	3.3
Any of the above forms of tobacco	15.6	8.4	7.9	7.6	27.1	18.7	15.4	14.2
Used tobacco ≥ 20 days in past month (frequent use):								
Cigarettes	2.1	0.9	1.2	0.6	10.3	5.4	3.9	3.0
Cigar use	0.6	0.3	0.2	0.4	0.8	0.8	0.4	0.7
Smokeless tobacco	0.5	0.3	0.3	0.2	0.8	0.5	0.5	1.0
Pipes	0.5	0.5	0.6	0.4	0.6	0.7	0.7	0.5
<i>Bidis</i> (hand-rolled India cigarettes)	0.6	0.3	0.3	0.7	0.8	0.5	0.4	0.4
Cigarette smoking severity								
Ever daily smokers (all students)	6.2	2.9	2.6	---	19.8	11.0	7.8	---
Smoke ≥ 6 cigarettes/day (current smokers)	8.9	10.8	20.4	9.8	25.2	21.8	20.8	21.0
Smoked ≥ 100 cigarettes (ever smokers)	6.9	4.4	8.6	5.2	27.0	16.8	15.8	12.9
Need a cigarette every day (current smokers)	11.9	18.7	25.6	17.9	34.9	29.8	22.1	24.8
Current cigarette use by sex								
Male	---	4.8	4.7	4.2	23.3	14.3	10.9	9.5
Female	---	5.9	5.1	4.3	25.5	15.4	14.2	9.8
Age of initiation								
Smoked a whole cigarette before age 11	10.2	6.5	4.8	5.3	8.3	8.6	6.6	5.8
Smoked a cigar before age 11	4.0	3.1	2.7	---	3.5	3.3	2.8	---
Used smokeless tobacco before age 11	1.9	1.5	1.9	---	2.5	1.7	2.6	---
Cigarette preferences (current smokers)								
Usual brand of cigarettes:								
No usual brand	14.5	15.9	15.1	7.2	5.9	12.5	15.9	13.9
Marlboro	17.1	18.6	29.3	23.2	42.0	23.9	22.9	31.2
Newport	3.9	4.4	4.5	2.8	5.7	4.8	2.2	1.4
Camel	3.9	5.9	3.4	11.8	2.7	4.9	3.0	8.6
All others (including Virginia Slims, GPC, Basic, Doral etc.)	61.8	55.2	47.8	55.1	43.5	53.9	55.9	44.9
Usually smoke menthol cigarettes	61.5	61.4	78.2	70.3	76.1	75.8	71.0	72.4
Usual brand of menthol cigarettes:								
No usual brand	---	12.9	9.9	16.1	---	9.3	14.2	8.6

Table 2. Prevalence of selected tobacco indicators by school type, Hawaii YTS 2000, 2003, 2005 and 2007								
	Middle School				High School			
Tobacco Indicator	2000 HI %	2003 HI %	2005 HI %	2007 HI %	2000 HI %	2003 HI %	2005 HI %	2007 HI %
Kool	---	56.1	65.9	48.2	---	61.1	63.1	39.1
Salem, Newport, and generic brands	---	10.3	8.8	23.2	---	8.2	4.5	13.9
Other brand	---	20.8	15.4	12.5	---	21.4	18.2	7.3
Access (current smokers)								
Usual source of cigarettes for current smokers under 18 years of age:								
Store purchase	7.4	3.2	6.1	2.3	25.9	9.3	10.1	7.1
Vending machines	2.2	2.1	0	9.3	3.2	1.9	1.4	1.0
Gave someone money to buy them	16.3	16.0	20.5	14.6	25.4	28.0	26.7	35.1
Borrowed them from someone	28.1	22.6	23.4	18.4	22.2	28.6	28.3	25.7
Given by someone ≥ 18 years	4.4	11.9	6.0	6.7	9.7	9.3	11.2	8.2
Took them from a store/family member	15.5	19.2	19.0	14.7	2.6	6.3	9.2	4.4
Some other way	25.9	25.1	25.0	33.9	10.8	16.6	13.2	18.5
Usual quantity of cigarette purchase among purchasers:								
Individually (loose)	---	---	28.2	32.6	---	---	15.2	11.3
By the pack	---	---	57.7	55.1	---	---	71.0	82.0
By the carton	---	---	14.1	12.2	---	---	13.8	6.6
Cigarette purchases by smokers under 18 years of age:								
Place of most recent purchase								
Gas station	10.7	11.5	17.9	29.6	25.5	27.5	28.2	25.2
Convenience store	8.0	11.0	19.4	11.5	29.6	20.3	19.4	15.1
Grocery store	2.7	6.7	9.0	3.1	14.1	11.2	13.7	12.1
Drugstore	4.0	8.8	7.5	7.6	4.4	5.5	4.8	9.7
Vending machine	5.3	4.4	0	8.6	1.5	1.7	0.8	0.8
Internet	2.7	1.2	1.5	7.0	0.7	1.2	1.6	2.7
Other	66.7	56.4	44.8	42.5	24.1	32.6	31.5	34.3
Purchased from a lunch wagon or <i>manapua</i> truck in the past 30 days	---	---	10.8	10.0	---	---	12.6	13.8
Asked for ID to buy cigarettes in past month	26.3	33.3	32.1	---	36.1	35.4	37.8	---
Refused sale in past month (under 18 years)	28.9	29.6	28.6	31.5	43.3	37.1	30.8	33.4
Know where to buy loose cigarettes	---	---	29.8	27.5	---	---	24.4	29.7
School-all students								
Smoked cigarettes at school in past month	5.8	2.5	2.8	2.7	12.2	6.9	5.0	4.6
Used smokeless tobacco at school in past month	---	---	---	2.0	---	---	---	4.5
Know school employees who smoke on campus	---	22.0	17.4	---	---	34.5	30.7	---
Were taught, this school year, in class about:								
Danger of tobacco use	79.9	55.6	71.9	52.6	50.9	41.6	56.6	45.9
Reasons young people smoke	67.7	43.2	56.4	---	43.5	31.3	45.6	---
That most young people do not smoke	---	25.2	38.2	---	---	13.4	20.8	---
Practiced ways to say no to tobacco	49.0	40.4	57.8	38.1	23.7	27.7	32.3	25.7
Have heard of REAL	---	---	---	15.8	---	---	---	---
Is a member of REAL	---	---	---	3.1	---	---	---	---

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Tobacco Indicator	2000 HI %	2003 HI %	2005 HI %	2007 HI %	2000 HI %	2003 HI %	2005 HI %	2007 HI %
Participated in a community event to discourage tobacco use in past year	15.1	16.6	14.0	24.7	18.1	14.7	15.3	20.6
Cessation (current smokers)								
Want to stop smoking	70.2	62.6	54.3	59.7	71.8	65.7	66.9	51.5
Tried to quit in past year	65.7	63.1	63.6	75.2	71.0	65.2	69.0	64.2
Last quit attempt lasted less than 30 days	37.0	37.3	39.2	47.1	45.1	44.1	36.1	50.2
Think they can quit (current smokers)	80.0	80.1	69.0	---	74.2	74.0	72.4	---
Think they can quit (frequent smokers)	43.5	---	---	---	58.4	57.7	48.0	---
Participated in a program to help them quit								
Ever used tobacco	15.0	22.1	22.4	19.9	9.9	14.2	12.7	9.4
Current tobacco users	14.2	18.2	23.2	24.0	13.6	15.3	14.5	13.3
Intention to start cigarette smoking								
Will try a cigarette soon	6.3	4.2	4.3	4.6	3.3	3.5	4.5	5.4
May smoke in the next year	---	11.8	12.9	6.5	---	13.6	14.3	13.6
May be smoking 5 years from now	---	16.1	20.6	---	---	16.6	18.5	---
Might smoke if offered by a friend	---	11.3	14.2	7.4	---	12.7	14.9	13.6
Susceptible to starting smoking (never smokers)	26.1	19.7	22.7	17.5	22.9	20.0	22.3	12.3
Smoking Beliefs (all students)								
Percent who agree with the following:								
Smokers have more friends	29.1	26.0	25.0	22.3	27.1	34.1	33.4	27.8
Smoking makes young people look cool/fit in	14.7	14.1	13.3	11.3	14.6	14.6	15.1	12.9
People can get addicted to cigarettes	91.1	88.0	89.7	87.9	91.3	87.9	91.5	89.8
It is safe to smoke for 1-2 years then quit	14.4	11.5	10.8	---	13.9	12.5	12.1	---
Smoking 1-5 cigarettes per day is harmful	87.0	84.3	83.0	---	90.6	89.9	89.1	---
Overestimate the number of smokers in their grade level	---	49.3	69.3	62.3	---	82.6	79.0	91.6
Social Influences (all students)								
One of more best friends smoke cigarettes								
All students	37.8	24.8	21.8	13.6	53.1	44.3	39.4	---
Never smokers	25.6	17.0	14.3	9.5	33.5	29.1	27.3	28.1
Current smokers	75.8	74.1	78.1	74.9	77.8	84.6	80.3	86.3
Lives with someone who smokes cigarettes								
All students	46.1	45.6	42.9	47.3	45.3	43.5	43.3	---
Never smokers	37.6	41.2	38.9	45.2	38.4	34.2	37.1	35.4
Current smokers	63.8	67.3	71.7	60.5	54.2	59.2	52.6	54.7
Adult Counsel on Smoking								
Parents/guardians ever told them not to smoke	83.3	86.8	86.3	---	80.4	82.3	84.5	---
Parents discussed smoking with them in past year	66.4	74.2	75.8	66.0	63.3	64.5	67.0	59.3
Doctor/staff discussed dangers of tobacco in	24.5	33.8	28.5	---	25.0	28.9	27.6	---

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	Middle School				High School			
Tobacco Indicator	2000 HI %	2003 HI %	2005 HI %	2007 HI %	2000 HI %	2003 HI %	2005 HI %	2007 HI %
past year (for those who went to a doctor)								
Dentist/staff discussed dangers of tobacco in past year (for those who went to a dentist)	20.6	27.3	21.6	---	17.2	16.8	18.8	---
Health professional (doctor, dentist, nurse) advised them not to smoke	----	----	---	29.2	---	---	---	---
Mass Media								
Antismoking commercial/ad exposure								
At least once in the past month	72.5	71.8	63.6	65.0	78.7	80.1	75.3	78.2
Daily during the past month	38.9	38.5	30.3	10.7	40.7	41.4	31.6	---
Often see actors smoking in movies or TV	80.6	76.8	76.9	74.3	89.5	84.4	87.1	82.8
Often see athletes using tobacco on TV	35.4	28.3	23.5	---	33.3	26.4	27.0	---
Often see tobacco product ads on the Internet	32.9	31.7	35.6	74.3	21.6	33.9	36.7	82.8
See tobacco products/gear ads at local stores or gas stations	75.3	75.7	78.2	71.3	82.2	83.4	83.1	76.6
Bought or received merchandise with a tobacco logo in the past year	16.2	9.9	11.0	13.5	22.5	13.2	12.4	---
Would wear apparel with tobacco logos	20.8	16.3	15.8	---	31.6	23.7	20.5	17.2
Receptive to tobacco advertising	6.5	4.4	5.2	0.0	10.8	6.7	6.1	0.0
Secondhand Smoke (SHS)								
Think SHS is harmful (all students)	89.3	86.5	88.4	87.5	91.7	90.4	93.8	93.3
Exposed to SHS in a room in the past week								
Never smokers	53.7	40.0	39.6	35.5	68.0	57.6	56.4	45.4
Current smokers	---	76.5	72.5	79.0	---	83.4	80.0	82.3
Exposed to SHS in a car in the past week								
Never smokers	40.0	33.0	31.1	24.8	49.4	39.3	34.8	21.4
Current smokers	---	68.7	59.6	67.1	---	73.6	64.7	73.7
Smoking rules inside the home								
Not allowed anywhere	---	---	72.6	76.4	---	---	69.4	77.3
Allowed in some places or some times	---	---	10.2	18.7	---	---	11.1	14.9
Allowed anywhere	---	---	3.4	5.0	---	---	3.1	7.8
No rules	---	---	13.8	---	---	---	16.4	---
Exposed to SHS at home in the past week	---	---	25.6	24.3	---	---	28.3	23.4
Exposed daily	---	---	12.8	10.6	---	---	14.4	11.9